

WHAT IS CLAIMED IS:

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A1  
1. A luminance level compensating apparatus comprising:  
a first masking device for passing only a luminance signal corresponding to a pixel in a first detection range in the vertical direction of an image which is indicated by an input luminance signal;

a second masking device for passing only a luminance signal corresponding to a pixel in a second detection range including said first detection range in the vertical direction of the image which is indicated by said input luminance signal;

a first histogram memory device for detecting and storing a first frequency for each luminance level of the luminance signal output from said first masking device for each predetermined period;

a second histogram memory device for detecting and storing a second frequency for each luminance level of the luminance signal output from said second masking device for each predetermined period;

a frequency data mixing device for generating mixed frequency data based on each of the first and second frequencies of said first and second histogram memory devices; and

a compensating device for compensating the luminance level of said input luminance signal based on said mixed frequency data.

2. A luminance level compensating apparatus according to

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claim 1, wherein each of said first and second histogram memory devices detects and stores said first and second frequencies for each field period, and

said frequency data mixing device generates said mixed frequency data for each field period.

3. A luminance level compensating apparatus according to claim 1, wherein said frequency data mixing device includes a multiplying device for multiplying the frequency for each luminance level stored in said first histogram memory device by a coefficient; and

a selecting device for comparing the frequency for each luminance level output from said multiplying device with the frequency stored in said second histogram memory device for each luminance level and for outputting a smaller frequency of the compared frequencies as the frequency data for each luminance level of said mixed frequency data.

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